

Date: Sat, 30 Jan 93 18:29:22 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #142
To: Info-Hams

Info-Hams Digest Sat, 30 Jan 93 Volume 93 : Issue 142

Today's Topics:

(none)
 Anyone with new FT-530 mods?
 DIMMER...H E L P
 Extended receive for an HTX-202?
 FM broadcast station sidebands
 FT-470 MOD's???? (2 msgs)
 Ham Radio Causes Cancer
 Info wanted on 800MHz MVPs (2 msgs)
 Radio Frequency interference and My Cat
 Re: 4N5 Callsigns
 real hams
 Real Hams Flamage
 Real NoCodes
 TS440S PLL HELP!!
 Two-Line Orbital Element Set Format
 Watt gives here?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Sat, 30 Jan 1993 20:21:32 GMT
From: swrinde!gatech!paladin.american.edu!howland.reston.ans.net!spool.mu.edu!
agate!usenet.ins.cwru.edu!news.csuohio.edu!vmcms.csuohio.edu!
R0264@network.UCSD.EDU
Subject: (none)
To: info-hams@ucsd.edu

In article <6400.9301261633@ua.nrb.ac.uk>
pdu@unixa.nerc-barry.ac.UK (Paul Jimbo Duncan GW7KES) writes:

>
>Hi,
>has nyone had any luch at driving PC serial ports at 45 or 50 baud. If not
>has anyone had any luck at using software to drive a PC parallel port as a
>TTL serial port at the baud rates (it should certainly be possible). A friend
>of mine has bought a RTTY demodulator kit, and a TTL to RS-232 level converter
>kit, but the PC doesn't seem to want to handle the slow baud rates required.
>RTTY to ASCII conversion is handled by the use of a lookup table take from a
>book on Amateur Radio Computing.
>
>Thanks for any help,
>
>73,
>
>Paul
>
>GW7KES@GB70NV pdu@ua.nrb.ac.uk
You can get those baud rates (or close enough, within a small fraction)
on a PC, but not by using the DOS serial-port facilities. You've got
to do some direct 8250 UART programming in assembler or maybe C or
Pascal, or even BASIC, or else purchase a RTTY program that does it for
you. ----- Phil, aa8jo.

Date: 30 Jan 93 20:37:23 GMT
From: swrinde!gatech!prism!ccoprfrfm@network.UCSD.EDU
Subject: Anyone with new FT-530 mods?
To: info-hams@ucsd.edu

In article <C1oM8B.MFD@feenix.metronet.com> marcbg@feenix.metronet.com (Marc Grant) writes:
>Well, we've got the general mods for the FT-530 which allows the expanded
>receive (and some transmit) from 110-180, 300-500, and 800-950 MHz. Has
>anyone played around with the other straps on the radio to see what they do?

I'm curious about this also. I wish I had time to sit down and play around
with those other straps to see what else is hidden away inside this radio...

I did notice in the manual that there is an extra digit on the 2 meter side
of the display. This could possibly indicate that the radio is capable of
receiving frequencies above 1000.000 Mhz...? Anyone else notice this? Think
it's possible?

--

Monte Freeman -- Operations Department / Information Technology
Georgia Institute of Technology, Atlanta Georgia, 30332
Internet: ccoprfm@prism.gatech.edu
Bitnet: ccoprfm@gitvm1.bitnet

Date: Tue, 26 Jan 1993 18:30:04 GMT
From: swrinde!cs.utexas.edu!qt.cs.utexas.edu!yale.edu!spool.mu.edu!
howland.reston.ans.net!usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpcc05!hplds!a!
brunob@network.UCSD.EDU
Subject: DIMMER...H E L P
To: info-hams@ucsd.edu

Hi,
After 3 month of investigation for the cause of 20 dB over S9 interference
on 40 mtr. band, I find it at the next door house, using a dimmer for there
light fixture in kitchen.

Need advise how to :

- a) approche friendly neighbor?
- b) should I replace the dimmer in there home?
- c) any "good" dimmers on the market?
- d) any other suggestions that may help.

from the log of AA6AD

Date: 31 Jan 93 00:04:45 GMT
From: (null)@cu-arpa.cs.cornell.edu@network.ucsd.edu
Subject: Extended receive for an HTX-202?
To: info-hams@ucsd.edu

Hello all,

Does anyone have an extended receive mod for a Realistic HTX-202?
Thanks.

```
=====
| Mark E. Cornell, Ph.D.           Internet: cornell@astro.as.utexas.edu |
| Software Support                cornell@puck.as.utexas.edu       |
| McDonald Observatory            |                                 |
| University of Texas, RLM 15.308 Voice:  (512) 471-3423 or 471-3000 |
| Austin, TX 78712-1083           FAX:    (512) 471-6016           |
=====
```

Date: Sat, 30 Jan 1993 18:37:38 GMT
From: swrinde!sdd.hp.com!think.com!rpi!usenet.coe.montana.edu!
news.u.washington.edu!sumax.seattleu.edu!thebes!ole!ssc!markz@network.UCSD.EDU
Subject: FM broadcast station sidebands
To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.uucp) wrote:

: In article <1993Jan26.122411.10075@hemlock.cray.com> dadams@cray.com writes:
: > years ago I learned that broadcast stations in the FM commercial
: > broadcast band (88-108 MHz) often do not need to use all of the
: > spectrum allotted to them for broadcasting what they broadcast, and
: > hence they some times broadcast other things on sidebands like
: > elevator music etc.
:
: The word you are looking for is "subcarrier", and the equipment you
: want is called a SCA or SubCarrier Adapter. All stereo FM stations,
: and BTSC stereo TV stations transmit subcarriers. For FM stations,
: there is a suppressed carrier at 19 kHz carrying the L-R information
: of the broadcast while the main channel transmits L+R, and a 38 kHz
: pilot tone to phase lock the quadrature demodulator for the stereo
: reconstruction. These subcarriers are applied as baseband modulation
: to the RF carrier.

Robert G. Schaffrath (RGS%MHCC@gfimda.UUCP) wrote:

: What you are referring to as FM "Sidebands" is in fact sub-carriers. The
: service you are referring to is called SCA (Subsidiary Communications Act or
: something like that) which runs on a carrier 67Khz down from the main channel.
: On a normal FM stereo signal, you will find a stereo pilot carrier at
: approximately 16.75 Khz down and the Left and Right information at around
: 33.5Khz down.

Urg. Usually you guys get the numbers better than this.

The FM stereo pilot is at 19 Khz +/- 2 Hz. The DSB suppressed carrier
Stereo difference signal is at 38 Khz with sidebands up to 15 kHz
either side.

Subsidiary Communications Authorization subcarriers can be anywhere
in the band from 53 to 99 kHz (or 20 to 99 kHz for a monophonic station).

Conventionally, audio subcarriers show up at 67, 75, and 95 kHz.

Mark Zenier markz@ssc.wa.com

Date: 30 Jan 93 21:41:40 GMT

From: olivea!charnel!rat!koko.csustan.edu!nic.csu.net!eis.CalState.EDU!
sadams@uunet.uu.net
Subject: FT-470 MOD's????
To: info-hams@ucsd.edu

Anybody know of MOD's for the FT-470?? I am a new user and am interested.
Thanks.

Date: 30 Jan 93 23:03:27 GMT
From: olivea!charnel!rat!koko.csustan.edu!nic.csu.net!eis.CalState.EDU!
sadams@uunet.uu.net
Subject: FT-470 MOD's????
To: info-hams@ucsd.edu

sadams@eis.calstate.edu (Steven Adams) writes:

>
> Anybody know of MOD's for the FT-470?? I am a new user and am interested.
> Thanks.

I think I found one via FTP FT470-2.mod

Date: 28 Jan 93 07:32:33 EST
From: psinntp!arrl.org@uunet.uu.net
Subject: Ham Radio Causes Cancer
To: info-hams@ucsd.edu

Anyone out there know of any studies concerning light waves and cancer? Are there a safe thresholds for the exposure to light or not? Unlike most EM studies, light is more or less easily controlled and measured, so one does not have the typically huge uncertainty concerning the actual exposure. So, it makes sense to me to start off doing research with what you can do with some sense of accuracy, and then extend the research into more difficult areas.

Zack Lau KH6CP/1

Internet: zlau@arrl.org	"Working" on 24 GHz SSB/CW gear
	Operating Interests: 10 GHz CW/SSB/FM
US Mail: c/o ARRL Lab	80/40/20 CW
225 Main Street	Station capability: QRP, 1.8 MHz to 10 GHz
Newington CT 06111	modes: CW/SSB/FM/packet
	amtor/ baudot

Phone (if you really have to): 203-666-1541

Date: 28 Jan 93 16:58:12 GMT
From: psinntp!lupine!hansen1!phil@uunet.uu.net
Subject: Info wanted on 800MHz MVPs
To: info-hams@ucsd.edu

Hello all,

A friend and I just purchased a few 800 MHz GE MVPs and now we are looking for information on them... Here is what we need...

- 1) Where to get a manual and what part number to order?
- 2) How to convert to full-duplex (aka repeater)
- 3) How to convert to 900 MHz HAM band
- 4) Any other information?

Getting the manual will tell us alot from the start... If you have any of this other info, I would love to get it!

Phil
de kj6nn
email: phil@ncd.com
FAX: 415-961-6289

Date: Sat, 30 Jan 1993 23:04:25 GMT
From: news.cerf.net!iat.holonet.net!bwilkins@network.UCSD.EDU
Subject: Info wanted on 800MHz MVPs
To: info-hams@ucsd.edu

phil@hansen1.ncd.com (Phil Graham) writes:

: Hello all,
:
: A friend and I just purchased a few 800 MHz GE MVPs and now we are looking for
: information on them... Here is what we need...
:
: 1) Where to get a manual and what part number to order?
Bay Area Service Center is a ge sales and service center in San Jose. They
may have or be able to order the manual for you.

:
: 2) How to convert to full-duplex (aka repeater)
:
: 3) How to convert to 900 MHz HAM band

The 902 - 928 MHz Amateur service in California has been rearranged by the primary service automatic vehicle location service. We may currently use the spectrum 902 - 903 MHz and 927 - 928 MHz. When Pacific Teletrak starts their avl service in the san Francisco bay area, we will not be able to use the rest of the band. 902 is the input to 927 repeater outputs. The channel spacing is 12.5 khz, narrow band technology must prevail to allow as many amateurs to participate in this shared spectrum. That's right you will run 2.5 khz deviation. It works. Scan the 930 commercial band..they are running trunked consecutive 12.5 khz channels. There are at least 6 amateur repeaters in central california and about 10 in southern california.

:
: 4) Any other information?

Because of the narrow band of frequencies there is no mountain to mountain linking on 902, the only links will be from mountain to low level ground sites. You wouldn't want someone's transmitter in your receive window would you?

: other info, I would love to get it!
: Phil
: de kj6nn
: email: phil@ncd.com
: FAX: 415-961-6289

This is a unique amateur band as we share it with several primary services...the only thing below us is part 15 devices that can run 1 watt. Just look at the noise floor....Silicon valley is littered with part 15 spread spectrum computer local area networks. Have fun Phil.

Watch out .. I understand that a 2.4 GHz repeater is going up "real soon" in the silicon valley. We see the 2400 MHz mobile radios being sold in the JA Magazines.

--

Bob Wilkins n6fri voice 440.250+ 100p1 san francisco bay area
bwilkins@holonet.net packet n6fri @ w6pw.#nocal.ca.usa.na

Date: Sat, 30 Jan 1993 20:39:10 GMT
From: swrinda@gatech!paladin.american.edu!darwin.sura.net!ukma!

news@network.UCSD.EDU
Subject: Radio Frequency interference and My Cat
To: info-hams@ucsd.edu

In article <johnr.728391933@aix3090b.uky.edu> johnr@aix3090b.uky.edu
(John S. Roberts) writes:

(stuff deleted to save space)

> Thanks,
> -== John S. Roberts, Jr. Office: 100 McVey Hall
> -== Communications Consultant Phone: (606) 257-2275
> -== Computing Center Home: (606) 272-1417
> -== University of Kentucky Ham: 146.76- pending DoD: 727

Thoughts on your cat problem:

Cancer has only been shown to affect lab rats and lower primates.....

Cats are strange by nature so get an iguana instead....

Quit licking your cats behind and the hair should grow back
soon.....

Recalibrate your cats tuning frequency to center of doorway to correct
annoying 'drift'..

Construct Rube Goldberg apparatus to transport cat from shelf through
center of doorway..

Hope this Helps.....
Zabrock the Slow

(this space for rent cheap) sorry no clever sig here...

PS.... BTW what about the following:

In article <44051@zygot.ati.com> john@zygot.ati.com (John Higdon)
writes:

>>
>>I swear if I hear about one more thing that "causes cancer"....
>>

>I can understand a higher rate of cancer among hams.

My question is this... does this apply to all hams or just smoked ones
as I really like glazed ham and would hate to think that the glazing
compound I use is harmful.....

Any advise would be most helpful

Date: Wed, 27 Jan 1993 16:41:22 GMT
From: swrinde!cs.utexas.edu!qt.cs.utexas.edu!yale.edu!spool.mu.edu!
howland.reston.ans.net!usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpcc05!hplds1a!
brunob@network.UCSD.EDU
Subject: Re: 4N5 Callsigns
To: info-hams@ucsd.edu

Macedonia - Yugoslavia

from the log of AA6AD

Date: Fri, 29 Jan 1993 03:52:04 GMT
From: psinntp!balltown!perley@uunet.uu.net
Subject: real hams
To: info-hams@ucsd.edu

In article <1993Jan26.194035.3889@sj.ate.slb.com> jones@sj.ate.slb.com (Clark Jones) writes:

>John Nagle (nagle@netcom.com) wrote:

>: Real Hams - I just can't resist.

>

>: Real Hams use code, even on HTs. At the base station they use a

>: Vibroplex.

I guess I'm not a real ham. I passed on most of the criteria, but
I have a Les Logan Speed-X bug instead of a Vibroplex.

-don perley - ke2tp

--

perley@balltown.cma.com

Date: 29 Jan 93 05:46:57 GMT
From: swrinde!zaphod.mps.ohio-state.edu!rphroy!caen!sol.ctr.columbia.edu!emory!
gatech!rpi!newsserver.pixel.kodak.com!laidbak!tellab5!balr!ttd.teradyne.com!
news@network.UCSD.EDU
Subject: Real Hams Flamage

To: info-hams@ucsd.edu

In article <1k4h1hINNbbi@west.West.Sun.COM>, flloyd@l1-a.West.Sun.COM (Fred Lloyd [Phoenix SE]) writes:

>
> To all those embroiled in this net.rathole:
>
>
> IT'S CALLED A GRIP: GET ONE!
>
>
> I swear, if this whining and bitching about CW does not stop soon
> I'm going to have to hurl. Where's the ham-radio section of this
> bbs anyway?
>

Yep. Could almost believe some of the claims that HT use causes brain cancer, or is that RF fields from KWs running CW, or or or or (I forget).

John Rice K9IJ
rice@ttd.teradyne.com

Date: Sat, 30 Jan 1993 20:03:19 GMT
From: swrinde!gatech!darwin.sura.net!spool.mu.edu!agate!usenet.ins.cwru.edu!
news.csuohio.edu!vmcms.csuohio.edu!R0264@network.UCSD.EDU
Subject: Real NoCodes
To: info-hams@ucsd.edu

In article <93026.143919MGB@SLACVM.SLAC.STANFORD.EDU>
<MGB@SLACVM.SLAC.STANFORD.EDU> writes:

>
>I have a Tech Plus liscense and am currently studying for my General. I
>also have numerous CB's which I use for vehicle/vehicle or ship/shore/vehicle
>communications. I have become involved with a number of Ares/Races groups
>and part of our Ham Club at work. Listening to some of the people who have
>General Liscenses on UHF, VHF, and HF, however, makes me wonder, however
>what they are complaining about as to the no-code techs. The pompous,
>elitist know it all attitudes and the level of language used by these
>"OM's" is worse than "kid" channels on CB. Although I can't speak about
>those who only use code, I'm still working on getting to an acceptable level
>of competence to copy them, the mentality of a number of "old timers" I have
>heard makes me wonder if they are keying the mic's with their tails.
>
>I can not help but wonder if those decrying "no-codes" are either so myopic

>that they do now see the jerks among their own ranks, or perhaps are part
>of the group that makes CB look good by comparison.

>

>Michael

>KD6OAY

>TechPlus

I listen to a lot of code on 7.0145 and thereabouts, for practice, without really paying much attention, while doing other things. It occurs to me after reading a lot of things about code vs no code, here and elsewhere, that I've almost never hear anything impolite or insulting in the code exchanges. The worst I ever heard was directed at me "...and Phil, your fist is terrible..", which was true at the time, because my key was not adjusted properly.

Phil ----- AA8JO

Date: Sat, 30 Jan 1993 12:39:19 GMT

From: agate!spool.mu.edu!howland.reston.ans.net!bogus.sura.net!udel!louie!
pecan.cns.udel.edu!penneys@ames.arpa

Subject: TS440S PLL HELP!!

To: info-hams@ucsd.edu

My TS440S is starting to have the signal and display go out intermittently on the three lowest bands-- 160, 80 and 40. What do I do?

HELP!!!!

Tnx Bob FRC WN3K

Date: Sat, 30 Jan 1993 00:44:05 GMT

From: concert!gatech!paladin.american.edu!howland.reston.ans.net!zaphod.mps.ohio-
state.edu!magnus.acs.ohio-state.edu!cis.ohio-state.edu!udecc.engr.udayton.edu!
blackbird.afit.af.mil!tkelso@decwrl.dec

Subject: Two-Line Orbital Element Set Format

To: info-hams@ucsd.edu

As a service to the satellite user community, the following description of the NORAD two-line orbital element set format is uploaded to sci.space.news and rec.radio.amateur.misc on a monthly basis. The most current orbital elements from the NORAD two-line element sets are carried on the Celestial BBS, (513) 427-0674, and are updated daily (when possible). Documentation and tracking software are also available on this system. The Celestial BBS may be accessed 24 hours/day at 300, 1200, 2400, 4800, or 9600 bps using 8 data bits, 1 stop

bit, no parity. In addition, element sets (also updated daily) and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

=====

Data for each satellite consists of three lines in the following format:

AAAAAAAAAAAA

```
1 NNNNNNU NNNNNNAAA NNNNN.NNNNNNNNN +.NNNNNNNNN +NNNNNN-N +NNNNNN-N N NNNNNN
2 NNNNNN NNN.NNNN NNN.NNNN NNNNNNNN NNN.NNNN NNN.NNNN NN.NNNNNNNNNNNNNNNNN
```

Line 0 is a eleven-character name.

Lines 1 and 2 are the standard Two-Line Orbital Element Set Format identical to that used by NORAD and NASA. The format description is:

Line 1

Column	Description
01-01	Line Number of Element Data
03-07	Satellite Number
10-11	International Designator (Last two digits of launch year)
12-14	International Designator (Launch number of the year)
15-17	International Designator (Piece of launch)
19-20	Epoch Year (Last two digits of year)
21-32	Epoch (Julian Day and fractional portion of the day)
34-43	First Time Derivative of the Mean Motion or Ballistic Coefficient (Depending on ephemeris type)
45-52	Second Time Derivative of Mean Motion (decimal point assumed; blank if N/A)
54-61	BSTAR drag term if GP4 general perturbation theory was used. Otherwise, radiation pressure coefficient. (Decimal point assumed)
63-63	Ephemeris type
65-68	Element number
69-69	Check Sum (Modulo 10) (Letters, blanks, periods, plus signs = 0; minus signs = 1)

Line 2

Column	Description
01-01	Line Number of Element Data
03-07	Satellite Number
09-16	Inclination [Degrees]
18-25	Right Ascension of the Ascending Node [Degrees]
27-33	Eccentricity (decimal point assumed)
35-42	Argument of Perigee [Degrees]
44-51	Mean Anomaly [Degrees]
53-63	Mean Motion [Revs per day]
64-68	Revolution number at epoch [Revs]

69-69 Check Sum (Modulo 10)

All other columns are blank or fixed.

Example:

NOAA 6

1 11416U 86 50.28438588 0.00000140 67960-4 0 5293

2 11416 98.5105 69.3305 0012788 63.2828 296.9658 14.24899292346978

--

Dr TS Kelso
tkelso@afit.af.mil

Assistant Professor of Space Operations
Air Force Institute of Technology

Date: Sat, 30 Jan 1993 20:13:41 GMT
From: amdcad!amdc12!brian@decwrl.dec.com
Subject: Watt gives here?
To: info-hams@ucsd.edu

[flame on :-)]

I've seen the phrase "watts of power" far too often recently. It crops up in avertisements and now even in professional magazines (like the IEEE's Spectrum)! Just exactly watt (sic) is a watt of power? If we have to qualify "watts" with "of power," does that mean that we could have watts of energy or watts of resistance or even watts and watts of money?

Has watts gained status as a collective noun like covey of quail or herd of turtles? :-) What about the other spec's of a radio:

Supply: 12 volts of electric potential
Antenna Impedance: 50 ohms of resistance
Scan Speed: 30 channels of memory per second of time
TX range: 140-150 Hertz of frequency
Power: 5 watts of power
Cost: 350 dollars of US currency

[calories of flame mode off :-)]

Brian McMinn, N5PSS
brian@nucleus.amd.com

Date: Sat, 30 Jan 1993 21:44:15 GMT
From: swrinde!gatech!paladin.american.edu!howland.reston.ans.net!zaphod.mps.ohio-

state.edu!news.acns.nwu.edu!casbah.acns.nwu.edu!jweiss@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993Jan21.152449.5163@mixcom.com>, <H.nAurutby1fs@red.uucp>,
<1993Jan29.113455.2238@usl.edu>-st
Subject : Re: Through-the-glass antennas

In article <1993Jan29.113455.2238@usl.edu> jab0684@usl.edu (Boudreaux Jean A)
writes:

>In summary and In response to Terrence's posting about Larson on glass
>antennas, let me summarize by saying I've gotten about 5 or 6 posts
>here saying that they do indeed work. However I've also seen 2 other
>posts besides mine(one hear and one on rec.scanner) saying that they
>do NOT stay in place on your glass. Furthermore if you loose it
>you are out for the \$\$\$. So I guess the real question is are you
>a superb antenna installer and do you feel lucky.
>

If you've applied Rain-X (tm) or similiar treatment to the
glass I would not expect anything to hold for long. Nor would I
expect the cleaning treatment to remove it.

I've have both the Larsen and Antenna Specialists glass mounts on my and
my xyl mobiles for >3 years without mishap. The Larsen is the better of the
two and probably equal to 5/8 trunk mount in most cases. The AS is
more forgiveing of mistakes because it is tunable (hi-hi). I don't bother to
remove the antenna's when I enter the garage so whips bend and stress the
mount every night. I do not understand why a proper installation would
fail but I guess that is risk you take.

Jerry WB9MRI

--

Jerry S. Weiss "If you can't stand the heat, stay out of the antimatter!"
j-weiss@nwu.edu Dept. Medicine, Northwestern Univ. Medical School

End of Info-Hams Digest V93 #142
